REMARKS

The Office Action dated October 18, 2005, has been received and carefully considered. Reconsideration of the outstanding rejections in the present application is respectfully requested based on the following remarks.

I.   THE ANTICIPATION REJECTION OF CLAIMS 1, 3-7, 9, 10, 12-16, 18, 19, AND 21-24

On pages 2-8 of the Office Action, claims 1, 3-7, 9, 10, 12-16, 18, 19, and 21-24 were rejected under 35 U.S.C. § 102(a) as being anticipated by Rajagopalan et al. (IP Over Optical Networks: Architectural Aspects, IEEE Communications Magazine, September 2000). This rejection is hereby respectfully traversed.

Under 35 U.S.C. § 102, the Patent Office bears the burden of presenting at least a prima facie case of anticipation. In re Sun, 31 USPQ2d 1451, 1453 (Fed. Cir. 1993) (unpublished). Anticipation requires that a prior art reference disclose, either expressly or under the principles of inherency, each and every element of the claimed invention. Id.. "In addition, the prior art reference must be enabling." Akzo N.V. v. U.S. International Trade Commission, 808 F.2d 1471, 1479, 1 USPQ2d 1241, 1245 (Fed. Cir. 1986), cert. denied, 482 U.S. 909 (1987). That is, the prior art reference must sufficiently describe the

claimed invention so as to have placed the public in possession of it. In re Donohue, 766 F.2d 531, 533, 226 USPQ 619, 621 (Fed. Cir. 1985). "Such possession is effected if one of ordinary skill in the art could have combined the publication's description of the invention with his own knowledge to make the claimed invention." Id..

Regarding claims 1, 10, and 19, the Examiner asserts that Rajagopalan et al. discloses the claimed inventions. However, its is respectfully submitted that Rajagopalan et al. fails to disclose registering photonics network nodes by collecting information about each photonics network node, storing information pertaining to each registered photonics network node at the O-UNI server, and instructing photonics network switches upon verifying compatibility of first and second registered photonics network nodes to search for an end-to-end wavelength path and establish the connection between the first and second registered photonics network nodes, as claimed.

Specifically, the Examiner asserts that Rajagopalan et al. discloses instructing photonics network switches upon verifying compatibility of first and second registered photonics network nodes to search for an end-to-end wavelength path and establish the connection between the first and second registered photonics network nodes, as claimed, by disclosing "route computation with

constraints." However, it is respectfully submitted that this disclosure by Rajagopalan et al. in no way discloses, or even suggests, <u>instructing photonics network switches</u> upon verifying compatibility of first and second registered photonics network nodes <u>to search for an end-to-end wavelength path</u> and establish the connection between the first and second registered photonics network nodes, as claimed. In contrast, Rajagopalan et al. merely discloses that "a request to establish a lightpath may originate from an IP router" and "be sent to the OXC [optical cross connect] that contains the source port." Rajagopalan et al. also discloses that "[t]he OXC is then responsible for computing the route and establishing the path." Indeed, Rajagopalan et al. goes on to disclose that "the computation of" the path "may be based on algorithms . . . executed by the source OXC." This clearly differs from the claimed <u>single O-UNI server</u> containing a communication circuit for <u>instructing photonics network switches</u> upon verifying compatibility of first and second registered photonics network nodes <u>to search for an end-to-end wavelength path</u> and establish the connection between the first and second registered photonics network nodes, as claimed. Additionally, even though Rajagopalan et al. discloses the possibility of route computation in a route server, this disclosure does <u>not</u> encompass <u>instructing photonics network</u>

switches to search for an end-to-end wavelength path, as claimed. In contrast, such a disclosure teaches away from the claimed inventions by explicitly requiring the single route server to compute a path rather than instruct photonic network switches to search for such a path, as claimed.

At this point it should be noted that Rajagopalan et al. also fails to disclose registering photonics network nodes by collecting information about each photonics network node, and storing information pertaining to each registered photonics network node at the O-UNI server, because Rajagopalan et al. merely discloses "a route server that has complete knowledge of link state and path routes." However, knowledge of link state and path routes dose not imply information about each photonics network node as the Examiner asserts, but rather only indicates knowledge of how nodes are interconnected.

In view of the foregoing, it is respectfully submitted that Rajagopalan et al. does not disclose, or even suggest, the limitations of claims 1, 10, and 19. Accordingly, it is respectfully submitted that claims 1, 10, and 19 should be allowable.

Each of claims 3-7, 9, 12-16, 18, and 21-24 is dependent upon one of independent claims 1, 10, or 19. Thus, since independent claims 1, 10, and 19 should be allowable as

discussed above, claims 3-7, 9, 12-16, 18, and 21-24 should also be allowable at least by virtue of their dependency on independent claims 1, 10, or 19. Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned anticipation rejection of claims 1, 3-7, 9, 10, 12-16, 18, 19, and 21-24 be withdrawn.

II. **THE OBVIOUSNESS REJECTION OF CLAIMS 2, 8, 11, 17, 20, 25, AND 26**

On pages 9-12 of the Office Action, claims 2, 8, 11, 17, 20, 25, and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rajagopalan et al. (IP Over Optical Networks: Architectural Aspects, IEEE Communications Magazine, September 2000) either alone or in view of Metz ("IP Over Optical: From Packets to Photons", IEEE Internet Computing, November-December 2000) or Zhang et al. ("Signaling Requirements at the Optical UNI", Internet Draft, July 14, 2000). This rejection is hereby respectfully traversed.

Each of claims 2, 8, 11, 17, 20, 25, and 26 is dependent upon one of independent claims 1, 10, or 19. Thus, since independent claims 1, 10, and 19 should be allowable as

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discussed above, claims 2, 8, 11, 17, 20, 25, and 26 should also be allowable at least by virtue of their dependency on independent claims 1, 10, or 19. Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 2, 8, 11, 17, 20, 25, and 26 be withdrawn.

III. <u>CONCLUSION</u>

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number, in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made.

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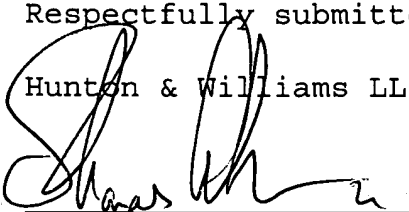
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Respectfully submitted,

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